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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,001	06/04/2001	Naoyuki Tani	NITT-4	6419
1473	7590	01/21/2004	EXAMINER	
FISH & NEAVE 1251 AVENUE OF THE AMERICAS 50TH FLOOR NEW YORK, NY 10020-1105			BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/786,001

Applicant(s)

TANI ET AL.

Examiner

Melanie D. Bissett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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1. The rejections based on 35 USC 112 have been withdrawn based on the applicant's amendments. The prior art rejections have been altered in the present Office action.

2. Note: Regarding the limitations stating "having a first order melt transition range of less than about 15 °C", it is the examiner's position that this should not be confused with a limitation drawn to the melt temperature of the material. Rather, the limitation is drawn to the breadth of range over which the melt transition spans. This is supported by the present specification, p. 10 lines 7-18.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt (WO 92/13901).

5. Schmitt teaches adhesive compositions which are tacky within predetermined ranges but nontacky outside of the predetermined ranges, where the adhesive compositions comprise a pressure-sensitive adhesive (PSA) component and 1-50% by weight of a crystalline polymer (abstract; p. 11 lines 4-17). Rapid melt transitions are referred, where these transitions occur over a span of less than 10 °C (p. 15 lines 25-32). The reference teaches that adhesives made from crystalline polymers having a molecular weight below 25,000 may be removed by heating above a predetermined

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temperature (p. 18 line 35-p. 19 line 3). Side-chain crystallizable polymers are preferred (p. 23 lines 17-20), where linear aliphatic C<sub>16</sub>-C<sub>22</sub> acrylates and methacrylates are most preferred (p. 26 lines 17-25). Molecular weights preferably fall between 3500 and 12,000 (p. 30 lines 16-20). Note that the reference teaches the same crystalline polymer as that exemplified by the applicant (compare p. 24, lines 15-17 with the present specification, p. 11, line 33-p. 12, line 2).

6. The reference gives a table of preferred acrylate and methacrylate monomers along with their melt transition temperatures (Table 1), teaching that production temperature ranges can be tailored by selecting a crystalline polymer with a melting point within the range and using the necessary amount of crystalline polymer to achieve the desired production temperature range (p. 28 lines 16-22). The adhesives may then be heated above this predetermined production temperature range to reduce tack of the adhesive and remove the adhesive article. An example of >45 °C is given for a removal temperature (p. 32 lines 26-32). Regarding the limitation that the adhesiveness is "decreased by more than about 90% when heated above about 50 °C with respect to the adhesiveness when measured at 25 °C", it is noted that this limitation only requires that the adhesive be capable of such a property. Because the crystalline materials of the reference are the same as those employed by the applicant and because the crystalline materials are used in the adhesive composition in the same manner as those employed by the applicant, it is the examiner's position that the adhesives of the reference would possess the same adhesiveness capability as those from the applicant.

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Thus, the adhesiveness reduction above 50 °C is inherently possessed by the adhesives of Schmitt.

7. Although the reference teaches that conventional additives such as tackifiers may be included in the adhesives, the reference does not specify the amount of tackifier to be added (p. 31 lines 15-34). Because it is known to include tackifiers in adhesive compositions to increase tack, it is the examiner's position that it would have been prima facie obvious to add any conventional amount of tackier to the adhesives of Schmitt's invention to optimize the tack of the adhesives at the temperature where adhesiveness is desired.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt in view of Newman et al.

9. Schmitt applies as above, noting the use of the adhesives for medical purposes (p. 33 lines 5-24) but failing to mention a double-sided tape construction. Newman teaches a conventional double-sided tape construction having a backing material coated on both sides with a PSA material (col. 3 lines 63-66). The double-sided tape constructions are used in medical articles to hold tubes to a patient's skin, where the two PSA layers are used to adhere two different materials (col. 3 line 66-col. 4 line 24). It is the examiner's position that it would have been prima facie obvious to use the PSA of Schmitt's invention in a double-sided tape construction as taught by Newman et al. to provide an article capable of adhering two different materials.

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***Response to Arguments***

10. In response to the applicant's arguments that Schmitt does not disclose a temperature-sensitive adhesive for a workpiece retainer of claim 1, the examiner has pointed to the passages of Schmitt which teach or suggest each of the limitations. This includes the tackifier limitation. It is the examiner's position that it would have been obvious to employ any amount of tackifier necessary to improve tack at temperatures where adhesiveness is desired. The reference itself suggests the use of such a material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
RABON SERGENT  
PRIMARY EXAMINER

mdb